



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,074	03/18/2004	Kia Silverbrook	FPD001US	5183
24011 7590 06/24/2009 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA				
EXAMINER				
MCCOMMAS, BRENDAN N				
ART UNIT		PAPER NUMBER		
2625				
MAIL DATE		DELIVERY MODE		
06/24/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/803,074

**Applicant(s)**

SILVERBROOK, KIA

**Examiner**

BRENDAN MCCOMMAS

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-16, 18 - 20, 21-31, and 32 - 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16, 18 - 20, 21-31, and 32 - 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/18/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1, 4-6, 10-12, 14, 16, 19-21, 26, 29, 30 and 33-34** are rejected under 35 U.S.C. 103(a) as being anticipated by Akira et al. (Japanese Patent Application Publication 2001-130090), hereinafter referenced as Akira further in view of Brenner et al. (United States Patent 6,206,593), hereinafter referenced as Brenner.
2. **Regarding claim 1**, Akira discloses a display with printer. In addition Akira discloses that the display device comprises:
  3. a flat panel display for displaying images from a computer, as disclosed in [0003];
  4. a paper feed mechanism for feeding the paper to the print head, as disclosed in [0004].
  5. a printer, the printer including a print-head 9 for printing onto paper, as disclosed in [0008] and exhibited in figure 2;
  6. In addition Akira discloses a display device further including a curved paper guide 22 and 20, disposed when the device is in use, beneath the flat panel display

such that the paper that has been printed is urged horizontally and then vertically as it exits the device, as disclosed in [0008] and exhibited in figure 2.

7. In addition Akira discloses an device wherein the paper feed mechanism, the print head and an exit into the curved paper guide define a substantially planar path through the printer and the paper is fed through the printer partially by the force of gravity, as disclosed in [0013]-[0014] and exhibited in figure 4.

8. However, Akira fails to explicitly disclose a curved paper guide disposed beneath the flat panel display for guiding the printed sheets only horizontally to exit the device. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification to the invention of Akira, as taught by Brenner.

9. In a similar field of endeavor, Brenner discloses an information processing apparatus. In addition Brenner discloses a curved paper guide (beneath the display and leading to opening 156) disposed beneath the flat panel display for guiding the printed sheets horizontally to exit the device, as disclosed in column 7, lines 39-45 and exhibited in figure 7.

10. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a curved paper guide disposed beneath the flat panel display for guiding the printed sheets horizontally to exit the device to the invention of Akira for the purpose of allowing the paper to stack neatly as it prints.

11. **Regarding claim 4**, Akira discloses everything claimed as applied above(see claim 1). In addition Akira discloses a display configured to receive print data to be

printed and display data to be displayed from a computer system, as disclosed in [0004].

12. **Regarding claim 5**, Akira discloses everything claimed as applied above (see claim 3). In addition Akira discloses a display device wherein the display device includes a connection 34 configured to allow releasable operative connection of the computer system to the display device, for receiving print data and the display data from the computer system, as exhibited in figure 3.

13. **Regarding claim 6**, Akira discloses everything claimed as applied above (see claim 5). In addition Akira discloses a display device wherein the connection includes one socket for accepting at least one corresponding data cable 34 as disclosed in figure 3.

14. **Regarding claim 10**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the paper feed mechanism is configured to position the paper substantially parallel defined by the flat panel display, as disclosed in [0008] and exhibited in figure 2.

15. **Regarding claim 11**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the paper feed mechanism is configured to accept a single sheet of paper at a time for printing, as disclosed in [0008] and exhibited in figure 2.

16. **Regarding claim 12**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the paper feed mechanism

includes a paper separator 8 for feeding a single sheet of paper to the print-head from a stack of sheets of paper, as disclosed in [0008] and exhibited in figure 2.

17. **Regarding claim 14**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the printer is an inkjet printer, as disclosed in [0008].

18. **Regarding claim 16**, Akira discloses everything claimed as applied above (see claim 1 or 14). In addition Akira discloses a display device wherein the printer is a page-width printer, as disclosed in [0004]-[0005] and exhibited in figure 1.

19. **Regarding claim 19**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device configured such that paper to be printed is fed manually into a paper path that directs the paper from a region adjacent the upper edge of the flat panel display, past the print-head for printing, then out of the device adjacent a lower edge of the flat panel display, as disclosed in [0008] and exhibited in figure 2.

20. **Regarding claim 21**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the flat panel display includes one of the following types, LCD or PDP. However Akira fails to explicitly disclose the display device wherein the flat panel display is an OLED or an FED, however at the time of the invention it would have been obvious to have the display be either an OLED display or an FED display for the purpose of offering a variety of display applications for the invention.

21. **Regarding claim 26**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses that the computer system is a personal computer, as disclosed in [0001].

22. **Regarding claim 29**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the device is configured such that, during printing, the paper being printed passes between the flat panel display and the print head or passes behind the flat panel display and the print head relative to the viewing position of the flat panel display, as disclosed in [0006] and [0020] and exhibited in figures 1 and 5.

23. **Regarding claim 30**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the sheet feeding mechanism is a multi-sheet paper holder 6, as disclosed in [0008] and exhibited in figure 2.

24. and the printing and display device further comprises a paper feed mechanism includes a paper sheet separator 8 for feeding a single sheet of paper to the print-head from a stack of sheets of paper, as disclosed in [0008] and exhibited in figure 2.

25. **Regarding claim 33**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device wherein the substantially planar path is parallel to a plane defined by the flat panel display, as disclosed in [0008] and exhibited in figure 1.

26. **Regarding claim 34**, Akira discloses a display with printer. In addition Akira discloses that the display device comprises:

- 27. a flat panel display for displaying images from a computer, as disclosed in [0003];
- 28. a paper feed mechanism for feeding the paper to the print head, as disclosed in [0004].

29. In addition Akira discloses a display device further including a curved paper guide 22 and 20, disposed when the device is in use, beneath the flat panel display, as disclosed in [0008] and exhibited in figure 2.

30. In addition Akira discloses an device wherein the paper feed mechanism, the print head and an exit into the curved paper guide define a substantially planar path through the printer and the paper is fed through the printer partially by the force of gravity, as disclosed in [0013]-[0014] and exhibited in figure 4.

31. However, Akira fails to explicitly disclose a curved paper guide disposed adjacent the paper exit slot and at the lower edge of the flat panel display, the curved paper guide for urging paper exiting from the exit slot such that the paper exits the device from the lower edge of the flat panel display, wherein paper is fed out of the exit slot with assistance from the force of gravity. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification to the invention of Akira, as taught by Brenner.

32. In a similar field of endeavor, Brenner discloses an information processing apparatus. In addition Brenner discloses a curved paper guide disposed adjacent the paper exit slot and at the lower edge of the flat panel display, the curved paper guide for urging paper exiting from the exit slot such that the paper exits the device from the



lower edge of the flat panel display towards a display side of the flat panel display, wherein paper is fed out of the exit slot with assistance from the force of gravity

33. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a curved paper guide disposed beneath the flat panel display for guiding the printed sheets horizontally to exit the device to the invention of Akira for the purpose of allowing the paper to stack neatly as it prints.

34. However, Akira fails to explicitly disclose the paper exits towards a display side of the flat panel display. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification to the invention of Akira, as taught by Brenner.

35. In a similar field of endeavor, Brenner discloses an information processing apparatus. In addition Brenner discloses the paper exits towards a display side of the flat panel display.

36. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a curved paper guide disposed beneath the flat panel display for guiding the printed sheets horizontally to exit the device to the invention of Akira for the purpose of allowing the paper to come out near the user, as disclosed in

2. **Claims 2-3, 7-8, 13, 15, 18, 22-23, 25, 28 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Akira et al. (Japanese Patent Application Publication 2001-130090), hereinafter referenced as Akira further in view of known prior art.

3. **Regarding claim 2**, Akira discloses everything claimed as applied above (see claim 1). Akira fails to explicitly disclose the display device wherein the flat panel display forty centimeters on the diagonal, however at the time of the invention it would have been obvious to have a display greater than forty centimeters for the purpose of displaying an image with greater resolution.

4. **Regarding claim 3**, Akira discloses everything claimed as applied above (see claim 1). Akira fails to explicitly disclose the display device wherein at least two of the print-heads, the print-heads being disposed on either side of a path through which the paper is fed before printing, thereby enabling substantially simultaneous printing of both sides of a print media however at the time of the invention it would have been obvious to have the display include a printer to print on both sides of the print media for the purpose of double-sided printing.

5. **Regarding claim 7**, Akira discloses everything claimed as applied above (see claim 5). Akira fails to explicitly disclose a display device wherein the connection includes a wireless receiver for receiving the print data and/or the display data, however it was well known in the art at the time of the invention to include a wireless receiver on the device to receive print data for the purpose of printing from a different location.

6. **Regarding claim 8**, Akira discloses everything claimed as applied above (see claim 5). Akira fails to explicitly disclose a display device wherein the connection is a USB connection, however it was well known in the art at the time of the invention to

include a USB connection, for the purpose of using a different protocol for printing faster.

7. **Regarding claim 13**, Akira discloses everything claimed as applied above (see claim 1). Akira fails to explicitly disclose a display device wherein the printer is a process color printer, however at the time of the invention it would have been obvious to include a color printer for the purpose of creating color images.

8. **Regarding claim 15**, Akira discloses everything claimed as applied above (see claim 13). Akira fails to explicitly disclose that the printer has more than 5,000 inkjet nozzles, however at the time of the invention it would have been obvious to have a printer with over 5,000 ink-jet nozzles to create a high quality image.

9. **Regarding claim 18**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses that the display device is configured to enable printing of standard A4 sized sheet of paper, as disclosed in [0008] and exhibited in figure 2. Akira fails to explicitly disclose the display device configured to enable printing of letter size sheets of paper, however at the time of the invention it would have been obvious to have the display device configured to enable printing of letter size sheets of paper for the purpose of printing letters more easily.

10. **Regarding claim 22**, Akira discloses everything claimed as applied above (see claim 1). However Akira fails to explicitly disclose the display device wherein the print head is configured to receive halftone print data, however it would have been obvious at the time of the invention to include this modification to the apparatus for the purpose of conserving ink.

11. **Regarding claim 23**, Akira discloses everything claimed as applied above (see claim 1). However Akira fails to explicitly disclose a half-toning unit for generating half-toned image data and supplying it to the print head for printing, however it would have been obvious at the time of the invention to include this modification to the apparatus for the purpose of conserving ink.

12. **Regarding claim 25**, Akira discloses everything claimed as applied above (see claim 1). However Akira fails to explicitly disclose a that the print head is configured to print image and text data, however it would have been obvious at the time of the invention to include this modification to the apparatus for the purpose of allowing the user to quickly print whatever is on the screen, including text and images.

13. **Regarding claim 28**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device comprising

14. a connection 34 configured to allow releasable operative connection of the computer system to the display device, for receiving print data and the display data from the computer system, as exhibited in figure 3;

15. However Akira fails to explicitly disclose a data connection hub configured to allow connection of at least one data receiving device to the printing and display device enabling the data receiving device to receive data from the computer, however it would have been obvious at the time of the invention to include this modification to the apparatus for the purpose of allowing multiple computers to use the display and print device more easily.

16. **Regarding claim 32**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device being configured to receive documents to be printed from a computer system, as disclosed in [0001], the printing and display device including an interface being configured to:

17. receive, via the interface (word processing software), input from a user indicative of a print command, as disclosed in [0033]:

18. However Akira fails to explicitly disclose the display device which sends the commands from the printing and display device to the computer system, a print request configured to receive, from the computer system and in response to the print request a document to be printed and print the document.

19. However at the time of the invention it would have been obvious to include these commands in the code for the interface for the purpose of allowing the user to easily print the word processing document.

20. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Akira et al. (Japanese Patent Application Publication 2001-130090), hereinafter referenced as Akira in view of Lee (U.S. Patent 5,752,049).

21. **Regarding claim 24**, Akira discloses everything claimed as applied above (see claim 1). However Akira fails to explicitly disclose a that the print head is configured to print photographic images, however it would have been obvious at the time of the invention to include this modification to the apparatus, as taught by Lee

22. In a similar field of endeavor Lee discloses an integrated computer and printer system and method for managing power thereof. In addition Lee discloses that the

print head is configured to print photographic images, as disclosed in column 4, lines 2-5.

23. Therefore it would have been obvious to one of ordinary skill in the art to provide such a modification to the invention of Akira for the purpose of allowing the user to quickly print a photo on the screen.

24. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Akira et al. (Japanese Patent Application Publication 2001-130090), hereinafter referenced as Akira in view of Inoue et al. (U.S. Patent 6,120,127), hereinafter referenced as Inoue.

25. **Regarding claim 27**, Akira discloses everything claimed as applied above (see claim 1). In addition Akira discloses a display device comprising:

26. a stand for holding the flat panel display in at least one operative position, as disclosed in [0003]; and

27. However Akira fails to explicitly disclose a that the stand contains a receptacle for the at least one replaceable print-cartridge, however it would have been obvious at the time of the invention to include this modification to the apparatus, as taught by Inoue.

28. In a similar field of endeavor, Inoue discloses a recording apparatus with ink tank movable relative to recording head. In addition Inoue discloses that a stand 405 contains a receptacle 4107 for at least one replaceable print-cartridge 4111, as disclosed in and exhibited in figures 75 and 76A

29. Therefore it would have been obvious to one of ordinary skill in the art to provide such a modification to the invention of Akira for the purpose of allowing the user to quickly change out the print-cartridge when necessary.

30. **Claim 34** is rejected under 35 U.S.C. 103(a) as being unpatentable over Akira et al. (Japanese Patent Application Publication 2001-130090), hereinafter referenced as Akira in view of Inoue et al. (U.S. Patent 6,120,127), hereinafter referenced as Inoue.

31. **Regarding claim 34**, Akira discloses a display with printer. In addition Akira discloses that the display device comprises:

32. a flat panel display for displaying images from a computer, as disclosed in [0003];

33. a paper feed mechanism for feeding the paper to the print head, as disclosed in [0004].

34. In addition Akira discloses a display device further including a curved paper guide 22 and 20, disposed when the device is in use, beneath the flat panel display, as disclosed in [0008] and exhibited in figure 2.

35. In addition Akira discloses an device wherein the paper feed mechanism, the print head and an exit into the curved paper guide define a substantially planar path through the printer and the paper is fed through the printer partially by the force of gravity, as disclosed in [0013]-[0014] and exhibited in figure 4.

36. However, Akira fails to explicitly disclose a curved paper guide disposed adjacent the paper exit slot and at the lower edge of the flat panel display, the curved

paper guide for urging paper exiting from the exit slot such that the paper exits the device from the lower edge of the flat panel display towards a display side of the flat panel display, wherein paper is fed out of the exit slot with assistance from the force of gravity. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification to the invention of Akira, as taught by Inoue.

37. In a similar field of endeavor, Inoue discloses a recording apparatus with ink tank movable relative to recording head. In addition Inoue discloses a curved paper guide disposed adjacent the paper exit slot and at the lower edge of the flat panel display, the curved paper guide for urging paper exiting from the exit slot such that the paper exits the device from the lower edge of the flat panel display, towards a display side of the flat panel display wherein paper is fed out of the exit slot with assistance from the force of gravity, as disclosed in column 44, lines 35-67 and exhibited in figure 68.

38. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a curved paper guide disposed beneath the flat panel display for guiding the printed sheets horizontally to exit the device to the invention of Akira for the purpose of allowing the paper to face the user as it prints.

39.

### ***Response to Arguments***

12. Applicant's arguments filed 03/30/2009 have been fully considered but they are



Not persuasive. On page 7 of the Applicant's arguments, the Applicant argues, ' From the above illustration and disclosure, it is submitted that Akira does not disclose an arrangement where the paper feed mechanism, the print head, and the exit into the curved paper guide define a substantially planar path. A J-type paper carrying path is clearly not a substantially planar path. Akira also explicit describes that the paper is turned to the upper rear part of the device.' The Examiner respectfully disagrees and points to the fact that while a 'J' curve does have a small curve, the path on the long side of the 'J' curve is substantially planar over the whole exit of the paper. The Examiner recommends further defining the terms 'substantially planar' to overcome the combination of Akira and Brenner. On page of the Applicant's arguments, the Applicant argues, 'Akira fails to disclose feeding paper out of the device from a lower edge of the flat panel display. As recited in claim 1, the "device" is the "printing and display device". Similarly, in Akira, the "device" is the combination of the display section 2 and the printer section 3. From Fig. 5 of Akira, it is clear that paper does not exit the device adjacent a lower edge of the flat panel display. Rather, paper exits the device at an upper edge of the display after being passed through and turned upwards by the "J type" paper carrying path.' The Examiner points to the invention of Innoue to disclose such a feature in combination with Akira and Brenner to read on the added claim . In addition on page 8 the Applicant argues, 'Additionally, neither Akira nor Brenner et al. teach or suggest feeding paper out from the lower edge of the display towards a display side of the display. Referring for example to the printed paper exit guide 20 of Akira, it is explicitly clear that the exit guide 20 is urging paper upwards and towards a back of the

display and not towards a display side of the display. Similarly, Brenner et al. cause paper to be exited behind the display and not towards a display side of the display.' The Examiner has added the Innoue reference to overcome these deficiencies in Brenner and Akira, and refers to column 44, lines 35-67 and figure 68.

***Conclusion***

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **BRENDAN MCCOMMAS** whose telephone number is (571)270-3575. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Brendan N. MCommas/  
Examiner, Art Unit 2625

/B. M./  
Examiner, Art Unit 2625

/Twyler L. Haskins/  
Supervisory Patent Examiner, Art Unit 2625